# GREEN PURCHASING TRAIN-THE-TRAINER PRESENTATION February 2003 Dana Arnold Office of the Federal Environmental Executive

#### **UNIT 1 – TARGETING DIFFERENT AUDIENCES**

(Slide 2) As a trainer, it is important to understand that different levels of training should be provided to audiences that have differing roles in implementing affirmative procurement. The three primary audiences are (1) purchase card holders and purchase card administrators; (2) personnel involved with contracts – requirements generators/specification writers, contracting officers, contracting officer's representatives, other contract administrators; and (3) management (may include Commanders, directors, environmental personnel).

# 1. Purchase Card Purchaser's Training

(Slide 3) Training for purchase card holders and purchase card administrators should cover

- Why buy green?
- Regulations.
- The Comprehensive Procurement Guideline (CPG).
- The Recovered Materials Advisory Notices (RMANs).
- How and where to purchase recycled products.
- Resources where to get information and search for products.

# 2. Contract Personnel Training

(Slide 4) Training for personnel involved in contracting should cover the following major topics:

- Why buy green?
- Regulations.
- The CPG.
- The RMANs.
- The Federal Acquisition Regulation (FAR).
- Responsibilities (specification writers vs. contracting officer's representatives vs. contracting officers).
- Applying green purchasing to specific contracts.

#### (Slide 5)

- Using the three exceptions.
- Resources finding example contract language.
- Enforcement.
- Reporting.

#### 3. Management Personnel Training

(Slide 6) A briefing for management-level personnel and environmental staff should cover the following major topics:

- Why buy green?
- Regulations (briefly).

- The CPG and RMANs (briefly).
- How to implement an effective affirmative procurement (AP) program at a facility. (This should be the most detailed section.)
- Resources for additional information.

<u>Using a Combined Format</u>. Note that the first four major topics in the purchase card purchaser's training are repeated in the contract personnel training. If the size of the facility permits, it is more time efficient to combine the training for purchase card holders and contract personnel. In this format, both audiences attend from the start of the training session. After the purchase card training topics have been covered, the card holders are dismissed. The contract personnel remain for an additional module that covers the contract-specific topics. Experience has shown this to be effective and time-efficient.

#### **UNIT 2 – INTRODUCING GREEN PURCHASING**

(Slide 7)

# 1. Getting Started

It is recommended that you use a mini-quiz to break the ice. One option is to ask who is familiar with the chasing arrows recycling symbol. All hands should go up. Then ask who knows what each of the arrows represents. Most people answer "reduce, reuse, recycle," which is a good answer, but the wrong answer. The arrows stand for the fact that recycling is a system. The first arrow represents collection. When we separate materials from the trash and put them in a recycling bin, we think we are recycling. Actually, we are participating in the first step of the recycling process, collection. The second arrow represents manufacturing. Someone takes the recyclables, processes them, and uses them as a feedstock to manufacture a product. The third arrow represents purchasing. Unless someone purchases the recycled content product, there may be no incentive for manufacturers to use the recycled materials, and they could end up in neat, segregated piles in our landfills. So, purchasing products made from recycled materials is an essential part of the recycling system or recycling loop,

Another break-the-ice option is to ask the training participants to match common recyclables with the recycled content product(s) they are used to manufacture. Some are easy – e.g., recovered bottle glass is used to manufacture glass bottles – but others are tricky, such as the plastic from grocery bags is used to manufacture plastic lumber decking or the rubber from scrap tires is used to make soaker hoses.

#### 2. Why Buy Green?

(Slide 8) The Federal Government spends over \$200 billion on goods and services each year. The Federal-wide "buy green" program substantially minimizes negative environmental affects through the preferred use of products with positive environmental attributes. The benefits of green purchasing include:

- Improved ability to meet existing environmental and energy efficiency goals.
- Improved worker safety and health.
- Reduced liabilities.
- Reduced health and disposal costs.

There are many attributes associated with a product that may make it environmentally preferable to another product. Executive Order (E.O.) 13101 directs Federal agencies to modify their procurement programs to buy EPA-designated recycled content products and incorporate the principles and concepts in EPA's guidance on environmentally preferable purchasing (EPP). A number of other E.O.s address specific attributes such as toxic waste reduction, ozone depleting substances, biobased content, energy efficiency, fuel efficiency, and water efficiency. These E.O.s will be identified in the unit on Executive Orders. EPA identified the following positive environmental attributes that could be considered when seeking environmentally preferable

products and services:

- recycled content (covered in detail below)
- recyclability
- product disassembly potential
- durability
- reusability
- reconditioned or remanufactured
- take-back
- biobased
- energy efficiency
- water efficiency
- other attributes with positive environmental effects

Purchasers should also seek alternatives for products with excessive packaging or that contain or produce hazardous or toxic chemicals.

# 3. Why Buy Recycled?

(Slide 9) The affirmative procurement or "buy recycled" mandatory program taps the tremendous Federal buying power to provide support for our nation's recycling programs by closing the recycling loop.

[If you don't use the mini-quiz about the recycling arrows, then include the following information at this point in your presentation: We are all familiar with the recycling symbol or logo – the three chasing arrows. (Ask the audience what the three arrows stand for.) Although the arrows are often associated with reduce, reuse, and recycle, the design actually represents something else. The first arrow represents collecting recyclables. The second arrow represents manufacturing those materials into new products. And, the third arrow represents buying the recycled products to complete the recycling loop.]

Historically, the focus of recycling has been on collecting recyclables. Very little attention was given to purchasing recycled products. With a plentiful supply of common recyclables and a low demand for recycled products, the market prices for recyclable materials were low. In some areas of the country, there was simply a glut of recyclable materials. As a result, the cost of the collection service often exceeded the revenue from the sale of the material in government facility recycling programs. This is a function of the simple business concept of supply and demand. A solution to the economic woes of recycling programs is to increase the demand for recycled content products by buying them. This is the number one reason why we should buy recycled.

Increasing the demand for recycled products will provide incentive for manufacturers to develop new technologies for using recovered materials. Implementing affirmative procurement will create that demand. As technologies are developed and improved, prices of recycled products will become more competitive and the quality of recycled products will continue to improve.

Buying green has a number of environmental benefits. It results in energy savings. For example, it takes 95 percent less energy to manufacture an aluminum can from an old aluminum can than it does to make a can from raw materials because energy is not expended to mine and refine the bauxite ore. Buying recycled products also conserves resources. Obviously, fewer raw materials are used if products are made from materials taken from the waste stream. In addition, the materials diverted from the waste stream will not reach a landfill or incinerator. Reductions in the practices of landfilling and incineration result in less environmental contamination. Recovered materials provide feedstocks for several domestic industries including steel, aluminum, and paper. Lastly, the recycling industry provides jobs for many Americans.

The Federal government is committed to being a good steward of the environment. A great deal of emphasis is being placed on incorporating sustainability into all aspects of government operations. The practice of buying green is an important part of a good environmental management system.

(Slide 10) Why buy green? There are many good energy, environmental, and economic reasons, but another reason is that it's the law! Requirements for affirmative procurement are set forth in the Resource Conservation and Recovery Act (RCRA), the FAR, and E.O. 13101. The Energy Policy Act (EPAct) and the Farm Security and Rural Investment Act – commonly known as the 2002 Farm Bill – require the acquisition of energy efficient and biobased products. Other Executive Orders and individual Federal agency regulations and policies require us to purchase other green products. Therefore, we must buy green to comply with these legal requirements!

## 4. Myths About Buying Green

(Slide 11) There are two types of myths about green purchasing: that it is inconsistent with the current trends in acquisition and that there are price or performance problems. We'll address the first type of myths here and discuss price and performance later in the presentation.

First, it is not true that the requirement to buy green went away when we changed administrations. President Bush is very supportive of the buy green efforts. In fact, he added two requirements: to buy electronics that use low levels of power in standby mode and the buy-bio program. We'll discuss both of those during this presentation. The President has not revoked any of the greening the government executive orders, nor has he reduced any of the requirements in those orders.

Second, buying green is consistent with efforts to make Federal purchasing more like commercial purchasing. In fact, if we want to act like purchasers in American corporations, then we should be increasing our purchases of green products. American corporations dedicated to buying recycled or using recycled materials in their manufacturing process include McDonald's, which has spent more on recycled content products over the last ten years than the entire Federal government. McDonald's originally committed to spending \$100 million on recycled content products. Earlier this year, it announced that since 1990, it had spent \$4 billion on recycled content products. That includes anything from the clamshells that hold your food, napkins, bags, tray liners, and the trays themselves to the materials used in the construction of

McDonald's stores. Think about it. One company has done more than we have.

Other American companies committed to buying recycled products include Anheuser Busch, IBM, Sony, Miller Brewing, Ford, and Target. The domestic steel industry might not exist if it hadn't followed the lead of the Japanese and started using recycled steel as a feedstock instead of continuing to use huge amounts of energy to process raw materials. The aluminum industry is heavily dependent on recycled aluminum – again because using recycled aluminum significantly reduces energy usage. And even the paper industry is dependent on recycled fiber for 1/3 of its feedstock.

Another trend in federal purchasing is to buy commercial off-the-shelf items. All of the green products are commercial off-the-shelf items. EPA, for example, does not designate experimental or developmental recycled content products, nor does it designate products only available from a sole source.

Buying green is also consistent with buying from mandatory sources. Many of the green products are offered by the National Industries for the Blind companies or by UNICOR. And many of the vendors of these products are small, minority-, or woman-owned businesses. So, by buying green, you can often meet more than one of your purchasing requirements.

## 5. What is Green Purchasing?

(Slide 12) "Green" refers to a range of products, including recycled content, energy- and water-efficient, environmentally preferable, and biobased, as well as the use of non-ozone depleting substances, alternative fuel vehicles and alternative fuels. This presentation focuses on purchasing recycled content, environmentally preferable, and biobased products, although we will briefly discuss some of the energy-related changes to the FAR.

## 6. The Legal Framework

(Slide 13) There are statutory, Executive Order, and FAR bases for the green purchasing programs. The statutory mandates include RCRA, EPAct, and most recently, the 2002 Farm Bill. The Executive Orders include 13101, 13123, 13148, 13149, and 13221. We'll discuss these requirements in detail in the following units.

#### **UNIT 3 – EXECUTIVE ORDERS**

(Slide 14) (Slide 15)

# 1. Executive Order 13101 – Greening the Government through Waste Prevention, Recycling, and Federal Acquisition

E.O. 13101 was issued in September 1998. Its primary purpose is to improve the Federal government's waste prevention, recycling, and acquisition of recycled content products and environmentally preferable products and services.

<u>Executive-Level Requirements.</u> (Slide 16) The E.O. established a Steering Committee, a Federal Environmental Executive (FEE), and a Task Force with responsibility for its administration and implementation. The E.O. details the roles and duties of these high-level personnel. (*The audience does not need those details.*)

Note that the Steering Committee is comprised of the Chair of the Council on Environmental Quality, the FEE, and the Administrator of Federal Procurement Policy. These are some of the President's senior advisors on environmental and acquisition issues. The point is that E.O. 13101 and green purchasing are not just environmental programs, and they are not just acquisition programs. They are both. Our most successful green purchasing programs in the Federal government are the ones in which acquisition and environmental staff work together, often with facilities staff, to acquire green products and services.

(Slide 17)

Agency-Level Requirements. (Slide 18) The E.O. requires agencies to do the following:

- Designate Agency Environmental Executives at the level of Assistant Secretary or the equivalent.
- Develop and implement agency-wide or service-wide affirmative procurement programs.
- Track and report purchases of EPA-designated items to the FEE.
- Consider recycled content and environmentally preferable products when developing, reviewing, or revising specifications, product descriptions, and standards.
- Conduct pilot projects that implement EPP.
- Ensure the immediate implementation of procurement guidelines for printing and writing paper, re-refined lubricating oil, and retread tires.

(Slide 19)

- Establish goals for waste reduction, recycling, AP, and EPP.
- Obligate contractors to comply with the E.O.
- Promote waste prevention and recycling programs in all facilities.
- Provide awareness training to facility personnel on AP and EPP.

(Slide 20) The E.O. provides that the buy recycled requirements of RCRA apply to micro-

purchases (purchases worth \$2,500 or less). Occasionally, the rumor goes around that the buy recycled requirements do not apply to micro-purchases. This is not true. However, we recognize that it doesn't make sense for purchase card holders to complete a written justification when they decide not to buy a recycled content product. So, the E.O. provides that no written justifications are needed. (Slide 21) The trade off is that agencies are required to provide training and education to purchase card holders about the green purchasing requirements. The Buy Bio Workgroup, in conjunction with OFEE, is developing model green purchasing training for purchase card holders.

(Slide 22) E.O. 13101 also directs agencies to think green right from the start of an acquisition. This is a theme to which we will return over and over again. The E.O. directs that agencies consider whether a product can contain recycled or biobased content instead of virgin materials, the use of environmentally preferable products such as those containing no or low levels of toxic or hazardous substances, opportunities to buy reusable or repairable products instead of disposable products, product recyclability, and what will happen to the product at the end of its useful life.

# EPA Requirements. (Slide 23) The E.O. requires EPA to:

- Provide guidance on EPP and AP.
- Update the CPG and the RMANs every 2 years.
- Include evaluation of compliance with RCRA section 6002 in facility inspections (or in authorized State inspections) (Highlight this requirement as being a catalyst to increased efforts in implementing AP ENFORCEMENT! POSSIBLE NOVS!)
- Report inspection results to the FEE.
- Develop a web-based database to compile results of EPP pilot projects and other useful information pertaining to purchasing EP products and services.

<u>Facility-Level Requirements</u>. (Slide 24) E.O. 13101 does not contain specific green purchasing requirements for facility-level personnel. However, implementing AP and EPP at the facilities is essential for agencies to meet their statutory and E.O. requirements. Implementing AP/EPP at the facility level is addressed in detail in a separate training unit, "Program Implementation," which addresses how to accomplish the following major requirements at the facility level:

- Meet the buy-recycled requirements.
- Integrate EPP into acquisition decisions.
- Train appropriate personnel on AP and EPP.
- Promote AP and EPP.
- Track and report CPG purchases according to agency guidance.

#### 8. Other Related Executive Orders

- (Slide 25) In addition to E.O. 13101, several other E.O.s address various aspects of greening purchasing. Below is a list of these E.O.s with a brief description of how they promote greening purchasing.
- E.O. 13123 Greening the Government through Efficient Energy Management Promotes improved energy efficiency in the design, construction, and operation of Federal facilities and requires the consideration of ENERGY STAR® and other energy efficient products when purchasing or contracting for energy-using products.
- E.O. 13148 Greening the Government through Leadership in Environmental Management Directs Federal agencies to incorporate environmental management considerations into policies, operations, planning, and overall management. It addresses reduction of toxic chemicals and ozone-depleting substances, as well as the use of environmentally beneficial landscaping, including the purchase of EPA-designated landscaping products.
- E.O. 13149 Greening the Government through Federal Fleet and Transportation

  Efficiency Directs agencies to reduce their vehicle fleets' annual petroleum consumption by at least 20 percent by the end of FY 2005 (based on 1999 consumption levels). Strategies could include improvements in fuel efficiency, the use of alternative fuel vehicles, and the use of alternative fuels. It also requires the acquisition of EPA-designated fleet products, particularly re-refined lubricating oil and retread tires.
- <u>E.O. 13221 Energy Efficient Standby Power Devices</u> Requires agencies to purchase electronic devices with minimum standby power at or below one watt where available.

# **UNIT 4 – THE FEDERAL ACQUISITION REGULATION**

(Slide 26)

#### 1. Overview

(Slide 27) The FAR has always contained provisions on energy and environmental considerations in Part 23 – Environment, Conservation, Occupational Safety, and Drug-Free Workplace. However, we found that many acquisition officials never read Part 23, so additional requirements to implement E.O.s 13101 and 13123 have been added throughout the FAR. (Slide 28) The overall policy on buying recycled can be found in §23.403, and (Slide 29) the overall policy on buying energy efficient and environmentally preferable products can be found in §23.703.

The underlying theme of the statutory and Executive Order requirements is to think about energy and environmental considerations right from the start of an acquisition. For example, the Navy faces a significant financial liability to decommission old ships. Why? Because old ships may contain asbestos, lead-based paint, PCBs, contaminated oils, and other hazardous substances. So the Navy has begun to design new ships with the environment in mind. The Virginia class submarine, for which the Navy received a White House Closing the Circle Award, was green right from the start. The planners considered the materials used in the design, manufacture, and operation of the sub. The manufacturing materials included both those used in the sub itself and in the manufacturing process. The Navy could have simply said "these materials have always worked, let's use them again." Instead, the design team looked for less hazardous or non-hazardous alternatives and less-toxic or non-toxic alternatives. And they designed the sub for recyclability at the end of its useful life. This is an example of what can be done when you think green right from the start of a project.

#### 2. Acquisition Planning and Describing an Agency's Needs

(Slide 30) FAR Part 7, Acquisition Planning, now requires that acquisition officials think green. Section 7.103 directs agencies to consider the use of recycled content products, including recycled content paper, energy-efficient products, and other environmentally preferable products and services. (Slide 31) Section 7.105(b)(16) requires written acquisition plans to discuss applicable environmental and energy objectives. (Slide 32) Several agencies have an individual or team of individuals who review acquisitions to make sure that environmental considerations have been considered and included.

(Slide 33) Similarly, Part 11, Describing Agency Needs, requires agencies to consider energy and environmental factors when developing specifications, standards, and drawings. (Slide 34) Section 11.303 specifically addresses the E.O. directive to purchase printing and writing papers containing 30 percent postconsumer fiber.

#### 3. Commercial Items

(Slide 35) FAR Part 12, Acquisition of Commercial Items, has always provided for the use of recycled content products, but it is not as clear as it could be. It does not specifically say that it applies to purchases of recycled content or other green products. Nor does it say that it does <u>not</u> apply to purchases of these products. Instead, it simply says, that when buying recycled content products, contracting officers can use the recycled content certification clause.

## 4. Micropurchases and Simplified Acquisitions

(Slide 36) FAR Part 13 contains the provision making clear that the buy-recycled requirements apply to micropurchases. Part 13 also addresses simplified acquisitions and contains a list of laws that do not apply to simplified acquisitions under the Federal Acquisition Streamlining Act. If you read this list quickly, you will see that the Resource Conservation and Recovery Act is included and you might, therefore, conclude that the buy-recycled requirements don't apply to simplified acquisitions. That is not correct. The provision in §13.006 says only that the estimation provision in RCRA doesn't apply to simplified acquisitions.

RCRA section 6002 requires that agencies obtain both certifications that the recycled content of the products they are buying meet the agencies' content requirements and estimations of the actual recycled content of the products. The estimation provision was intended to be a market research tool. In other words, if an agency solicits for paper containing 30 percent postconsumer fiber and several of the offerors estimate that their products contain 40 percent postconsumer fiber, then the agency will know that it can specify a higher recycled content in the future. In reality, estimations are not a good market research tool because vendors tend to estimate that their products contain the amount of recycled content that the agency specified in the solicitation.

Congress declined to remove the estimation provision from section 6002. Instead, it changed the provision to require estimations only for solicitations worth \$100,000 or more. For this reason, you don't need to require estimates for simplified acquisitions.

#### 5. Architectural and Engineering Contracts

(Slide 37) FAR Part 36, Construction and Architect-Engineer Contracts, provides that agencies can ask for past experience in designing and using green products. Asking for past experience is an excellent way of assuring that a building or building renovation will be designed and built with green products. Let me give you two contracting examples to demonstrate this point.

First, a construction contractor in Wisconsin was building a new post office facility. In Wisconsin, electricity is generated by burning coal. One of the air pollution by-products is coal fly ash [pass around sample], which is widely used in concrete to substitute for some of the Portland cement and to provide strength properties. The architect who designed the new post office was not familiar with coal ash, however, and instead of asking for information from the Coal Ash Association or any of the concrete associations or EPA, the architect announced that the use of coal ash would cause the walls of the building to crack. Therefore, the contractor, who

routinely used coal fly ash in concrete, could not use it in this building and had to go out and buy virgin materials.

In the second example, when EPA needed a new building for its Kansas City regional offices, EPA and the General Services Administration (GSA) worked together to design a green building. They started by holding a design competition to identify firms familiar with designing green buildings. The winning firm designed a building that takes advantage of natural lighting, is energy efficient, and contains recycled content and environmentally preferable products.

#### **6. Performance Based Contracts**

(Slide 38) FAR Part 37.6 covers performance based contracts (PBCs). The use of these contracts is one of the new trends in Federal acquisition. In a PBC, instead of providing detailed specifications, the government states its basic performance needs, such as "use recycled content products designated by EPA in the Comprehensive Procurement Guideline and meeting EPA's minimum content recommendations." The contractor then determines how best to meet the specified needs. (Slide 39) Although FAR Part 37.6 does not apply to construction contracts, so far, the one example of a green PBC in the Federal government is a construction contract – the Pentagon renovation.

## 7. Environment and Energy

(Slide 40) As stated earlier, FAR Part 23 contains most of the energy and environmental considerations. Subpart 23.400 provides the buy-recycled requirements, including the basic requirement to buy EPA-designated products unless there is a price, performance, or availability reason not to buy recycled.

(Slide 41) In December of 2001, the FAR was revised to add additional energy considerations. Before then, the FAR required agencies to purchase energy efficient products. (Slides 42 and 43) The changes specify that we will also focus on using renewable energy technologies and energy-savings performance contracts. (Slide 44) In the future, the FAR will be further revised to reference the requirement to buy electronic products that use low levels of power in standby mode (the "vampires"). In the meantime, there is a list of these products on web site of the Department of Energy's Federal Energy Management Program (FEMP).

#### 8. Contract Clauses

(Slide 45) Finally, Part 52 contains two clauses to be used when buying recycled products. The first is the certification clause. The second is the certification/estimation clause to be used in contracts worth \$100,000 or more. There also is a waste reduction program clause, which is used in facility operations and maintenance contracts; this clause requires the contractor to implement waste prevention and recycling programs at the Federal facility.

#### **UNIT 5 – RECYCLED CONTENT PRODUCTS**

(Slide 46)

#### 1. Overview of RCRA Section 6002

(Slide 47) It's been Federal policy for more than 25 years to conserve resources and to use our purchasing power to create markets for products made from the materials that we recover in our home and office recycling programs. (Slide 48) The buy-recycled requirements apply to Federal agencies and to agency contractors. Thus, all service contracts must require the contractor to supply or use EPA-designated products in the performance of the contract. When there is a contract team, the contract must require the prime contractor to assure that subcontractors supply and use recycled content products.

The basic requirements. (Slide 49) RCRA requires Federal agencies and their contractors to buy an EPA-designated recycled content product if the agencies or contractors spend at least \$10,000 annually on the purchase of that item. This led to confusion at the facility level. Many facilities did not exceed the \$10,000 threshold and believed that AP requirements did not apply. However, the threshold applies to an entire agency (i.e., Department of the Interior, Department of Defense). For most of the larger Federal agencies, the threshold exemption does not apply for nearly all of the EPA-designated items.

(Slide 50) RCRA requires procuring agencies to purchase guideline items composed of the highest percentage of recovered materials practicable. RCRA also established three exceptions for not meeting AP requirements – price, performance, and availability. If you purchase an item that does not comply with AP requirements, your decision should be based on one of those three exceptions. Specifically, the exceptions are: the item was only available at an unreasonable price, the item fails to meet reasonable performance standards, or the item is not available within a reasonable period of time and at a satisfactory level of competition. RCRA did not define "unreasonable" for these exceptions.

(Slide 51) RCRA addresses incorporating AP in contracts in addition to direct purchases of designated items. RCRA states that contracting officers shall require vendors to (a) certify that the percentage of recovered materials to be used in the performance of the contract will be at least the amount required by the contract specifications, and (b) estimate the percentage of the total material used in the performance of the contract that is recovered material. (Slide 52) RCRA also requires that agencies that have responsibility for drafting or reviewing specifications for Federal procurements will eliminate from specifications text that excludes the purchase or use of recovered materials or requires items made from virgin materials. Specifications should require the use of recovered materials to the maximum extent possible.

Affirmative Procurement Plans. (Slide 53) Agencies are required to have affirmative procurement plans for purchasing the EPA-designated products. The plans basically identify which of the products the agency purchases, specify plans for promoting the buy-recycled program internally to agency staff and externally to vendors, address the certification and estimation requirements, and provide for annual review and monitoring of the program. [(Slide 54) At this point, you can insert a discussion of NASA's APP and where to find it on-line.]

OFEE and OFPP recommend that agencies have one affirmative procurement plan for all of the EPA-designated products and that agencies also address the purchasing of other green products in these plans. There is a model APP on OFEE's web site, www.ofee.gov.

Reporting. (Slide 55) RCRA gave responsibility for the overall implementation of the buy recycled program to the Office of Federal Procurement Policy (OFPP). RCRA also required OFPP to report to Congress every two years on the Federal government's progress in meeting the buy recycled requirements. Currently, OFPP and the Office of the Federal Environmental Executive jointly monitor agencies' implementation of the buy recycled program and prepare the Report to Congress. Reporting will be addressed later on in the reporting unit.

## 2. How the Buy Recycled Program Works

(Slide 56) The way the program works is that EPA designates products in the CPG. These products are often referred to as CPG items, EPA-designated products, recycled content products, and products containing recovered materials, but all of these terms mean the same thing – the products designated by EPA in the CPG. The FAR uses the term "EPA-designated products."

Once EPA designates products, agencies have one year to update their affirmative procurement plans; review and revise specifications, scopes of work, or solicitation language; test products; and educate employees about the requirement to buy recycled content products.

Before EPA designates a product, it researches the performance and availability of the product. EPA does not designate experimental or developmental products. Nor does it designate products only available from one source, unless it has found that others will soon be bringing products to market.

(Slide 57) EPA provides recommendations for purchasing the products in Recovered Materials Advisory Notices. EPA's recommendations include recommended percentages of recycled content and relevant government or industry specifications that can be used when purchasing the products. In some cases, EPA's recommendations also address other provisions that can be a barrier to buying recycled. [Hold up a piece of paper.] For example, would you all agree that this is a white piece of paper? For decades, the Federal government has specified the brightness of its paper. Brightness requirements originate in printing needs and originally, the brightness of printing papers and office papers were similar. But as graphics became more and more sophisticated – so that today, graphics jump off the page at you – brightness standards became higher than needed for office papers and higher than recycled papers could meet. In order to meet the higher standards, more and more chlorine would be required to bleach the paper or the companies would add titanium dioxide or other fluorescents to fool the eye into thinking that the paper is brighter. In fact, if I held a sheet of high brightness graphics paper next to this sheet of paper, this sheet would look blue or grey or greenish to you. But you all agree that it is a white sheet of paper. This is an example of the kind of requirement still found in older specifications that can create a barrier to buying recycled. So, as EPA learns about them, it alerts the agencies

to revise these specifications in order to successfully buy recycled.

## 3. The EPA-Designated Products

(Slide 58) To date, EPA has designated 54 items in 8 product categories. (Slide 59) Notice that the categories cover more than just paper or office products. In fact, there are designated products for office applications; for building construction, renovation, and maintenance; and for fleets. There are also park and recreation products for those agencies with recreational facilities, including day care facilities.

(Slide 60) Here is a sample product designation. The main point to note is that it is important to pay attention to what exactly EPA designated. In this case, EPA excluded marine and aviation oils, and agencies are not required to buy re-refined oil for these applications. So, the Coast Guard can buy virgin oil for its boats because re-refined marine oils are not available.

Let's look at the individual categories.

Paper products. (Slide 61) Note that this category covers more than office papers. [Circulate samples, such as file folders, hanging file folders, note pads, Post It® notes, and envelopes. Also circulate a roll of Skilcraft recycled content toilet paper. You can also distribute samples of a virgin paper and a recycled content paper and let the trainees figure out which is which.] It includes tissue products, newsprint, and paperboard and packaging.

<u>Vehicular products</u>. (Slide 62) There are only three products in this category: re-refined oil, retread tires, and reclaimed engine coolants. You can buy re-refined oil in bulk from the Defense Supply Center Richmond or from service stations. You can find a list of service stations and quick lubes that offer re-refined oil on OFEE's web site, under Green Purchasing.

The use of re-refined oil does not void engine warranties. Re-refined oil has to undergo the same testing as virgin oil and has qualified for the American Petroleum Institute's donut logo or starburst logo.

You probably question the quality of retread tires because you see rubber on the road. Actually, about half of the rubber on the road is from new tires and half is from retreads. The most common cause of tire failure is under-inflation, which causes the tire to heat up and the sidewall to burst. That's why, if you look closely at the tread left on the road, you will often see pieces of the steel belts sticking out, which is all that is left of the burst sidewall.

This is not to say that there have never been problems with retreads. There have. But a good quality retreader has a low failure rate. For this reason, America's major trucking fleets all use retreads, the Army rides on retreads, and half of the U.S. Postal Service's vehicles use retreads.

<u>Construction products</u>. (Slide 63) There are four things to note about products in this category. First, EPA designated polyester carpet, not all carpet. However, you can buy recycled content nylon carpet. EPA proposed to designate nylon carpet in 2001 and will be issuing the final designation in 2003. [Circulate samples of polyester and nylon carpet.]

Second, EPA designated rubber and plastic floor tiles, not ceramic tiles. The rubber and plastic tiles are used in heavy wear and grease areas, such as vehicle service bays or kitchens. Although it is not a designated product, you also can buy recycled content ceramic tile, and EPA did so for its Kansas City regional office building.

Third, products such as shower and restroom dividers cost more initially than comparable products, but can be the best value for the government because they require less maintenance. The National Park Service discovered, for example, that it is harder to carve graffiti onto plastic restroom stalls, and it is easier to remove inked graffiti. Similarly, the Army Corps of Engineers estimates that the costs of plastic lumber, which are more than conventional wooden lumber, are paid back within seven years due to reduced maintenance. Many of the national parks are now replacing wooden lumber with plastic lumber because of the maintenance advantage.

Fourth, most Federal agencies do not purchase products such as flowable fill or railroad grade crossing surfaces. Rather, these products are purchased by recipients of Federal assistance funding.

<u>Transportation products</u>. (Slide 64) These products are traffic control devices used in parking lots and roadways.

<u>Landscaping products</u>. (Slide 65) These products are often supplied as part of landscaping services, rather than purchased directly by the agencies. However, we do have agencies that compost yard trimmings and/or food scraps.

Parks and recreation products. (Slide 66) These products are self-explanatory.

Non-paper office products. (Slide 67) The primary product to note here is remanufactured toner cartridges. It does not void office equipment warranties to use remanufactured toner cartridges. In 2002, OFEE re-confirmed with both Hewlett-Packard and Xerox that their warranties allow the use of remanufactured toner cartridges.

<u>Miscellaneous</u>. (Slide 68) This is a catch-all category. The primary product to note is awards and plaques because all agencies purchase these products.

#### 4. Product Sources

(Slide 69) Where do you find the EPA-designated products? The first place to look is EPA's CPG web site, www.epa.gov/cpg. Click on the Products button, which will take you to a subpage that lists all 54 products. Each product is linked to a page that identifies what EPA designated and EPA's recommendations. It further links to technical background documents and to lists of known product manufacturers and vendors.

(Slides 70 - 78) Many of the products are also available from GSA, GSA's schedule vendors, the Defense Logistics Agency, the JWOD organizations, and company catalogues. The slides

included in your materials contain references to the GSA, Defense Logistics Agency (DLA), JWOD, and UNICOR web sites. Both GSA and DLA use icons or codes to identify green products. GSA Advantage uses more than a dozen icons to identify EPA-designated recycled content products, other recycled content products, Energy Star® and other energy efficient products, environmentally preferable products, biobased products, and products with other environmental attributes. DLA uses Environmental Attribute Codes or ENACS, which are two character codes that identify re-refined oil, reclaimed engine coolant, remanufactured toner cartridges, and other green products.

(Slide 79) In addition, many of the vendors of green products are small, minority-, or womanowned businesses. OFEE partnered with the Small Business Administration (SBA) to "green" PRO-Net, SBA's electronic listing of small businesses. Approximately 2,000 of the businesses listed in PRO-Net revised their listing to identify the EPA-designated recycled content products that they offer. You can now search PRO-Net for recycled content products. DLA and SBA are now discussing adding more environmental attributes to PRO-Net, including energy efficiency and products with low volatile organic compounds.

#### UNIT 6 – ENVIRONMENTALLY PREFERABLE PURCHASING

(Slide 80) When we consider recycled content, energy efficient, or biobased products, we look at a single attribute. Either the product contains the level of recycled content or biobased that we seek or it doesn't. Either the product is an Energy Star® product or it isn't. Either it meets the latest energy efficiency recommendations or it doesn't.

(Slide 81) The environmentally preferable purchasing program is an designed to look at multiple environmental attributes that are deemed important for an agency's needs and a facility's location. Products are then compared across the multiple attributes. Environmental attributes across a product's life cycle also can be considered.

Because EPP is product- and location-specific, there are many positive environmental attributes that could be considered in EPP programs. EPP is defined in E.O. 13101 as the procurement of products or services having a lesser effect on human health and the environment when compared to competing products or services. Examples of common EPP attributes are recycled content, biobased content, reduced toxicity, reduced packaging, energy efficiency, water efficiency, and durability. However, there are other EPP attributes that are less obvious, such as manufacturer take-back, absence of prohibited substances, reduction of dyes and fragrances, and methods of production. For example, the preference for chlorine-free paper considers the negative effects of paper production using chlorine bleach and the wastewater produced in that process.

While recycled content, biobased content, and energy efficiency can be attributes of an environmentally preferable product, it is not true that these products are always environmentally preferable. For example, because Aberdeen Proving Ground is located in an air non-attainment area, it is important to that facility to use products that have reduced or no volatile organic compounds (VOCs). Recycled content latex paint might contains VOCs and might not be able to meet Aberdeen's need for a low or non-VOC emitting product. In that instance, the recycled content product is not the environmentally preferable product.

#### 1. The Five Guiding Principles

(Slide 82) Under E.O. 13101, EPA developed EPP guidelines to assist Federal agencies in developing EPP programs. The EPA published Five Guiding Principles to help acquisition and procurement personnel weigh EPP attributes and determine a purchasing approach.

- The first principle, <u>Environment + Price + Performance</u>, simply incorporates environmental considerations into the typical purchasing equation. Along with the price of the product or service, and its ability to meet the needs of the user, we should consider and give comparable weight to the environmental benefits of the product.
- The second principle, <u>Pollution Prevention</u>, encourages the incorporation of environmental and health considerations early in the acquisition process. These efforts include reducing or eliminating potential risks associated with products or their manufacture. As early as in the design phase, planners and acquisition managers should

- evaluate environmental characteristics and incorporate them into plans, work statements, product descriptions, and specifications.
- Evaluating <u>Life Cycle/Multiple Attributes</u> is the focus of the third guiding principle. This concept forces procurement personnel to consider all factors in the life cycle of a product, to include the use of raw materials, the manufacturing process, energy use, product packaging, distribution of the product, how it is used, and how it is disposed.
- The fourth principle is the <u>Comparison of Environmental Impacts</u>. This presents factors for ranking various environmental attributes and helps a decision-maker choose between products with different beneficial characteristics. For example, a purchaser may consider the impact of a product, its manufacture, or its disposal, in terms of the potential damage it could cause to the environment. The damage could be characterized as local or global, depending on whether it contributes to localized air quality or degrades the earth's ozone layer. Or one could consider whether the recovery time for the environmental damage could be quantified in years or centuries. Other aspects of the fourth principle involve comparing differences among competing products according to their environmental *performance* for a certain attribute (not just the fact that they possess the attribute), and evaluating health benefits of the product.
- The EPA's fifth EPP guiding principle is <u>Environmental Performance Information</u>. This principle places importance on available, accurate product information to enable decision-makers to choose products wisely. Although advertising and labels provide some product information, the use of third party certifications or seals of approval (such as Green Seal, www.greanseal.org) can assist in product evaluation and selection.

## 2. Looking at Positive Attributes

So how do we buy environmentally preferable products and services? Simply put, we educate purchasers, specification writers, and procurement personnel to look for positive environmental attributes when they buy or specify. We can start by singling out the attribute of recycled content and trying to maximize the purchase of EPA-designated products (and other products) made with recovered materials. But beyond recycled content, there are many ways to practice EPP. Let's look at some of the other EPP attributes.

(Slide 83) One important attribute is reduced packaging. Paper and packaging make up over 40 percent of the national municipal solid waste stream, so showing preference for products with minimal packaging will help source reduction efforts. Purchasers should look for products with less packaging or packaging that is reusable or recyclable. Typically, EPP programs also stress reduction of toxic or hazardous constituents. This helps protect workers from adverse health effects and reduces the costs and harmful effects of hazardous waste disposal. For example, facilities are switching to citrus-based solvents over those made with petroleum products, choosing paints containing low concentrations of VOCs, and reducing acids and caustics in their cleaning products.

Purchasers can also look for environmentally preferable products that are non-chemical. For example, nickel-cadmium batteries, which may be used in power tools, cordless phones, and laptop computers, can be both rechargeable and recycled at the end of their useful life.

Rechargeable batteries extend the life of the product and reduce battery waste. The recycling seal of the Rechargeable Battery Recycling Corporation signifies that the batteries can be sent to that organization for recycling. Retail stores selling the batteries may also accept them. We can also buy "green" electronics. Computers, copiers, monitors and other electronic equipment should contain the Energy Star® logo, to signify that the product meets EPA or DOE standards for energy efficiency and/or has energy-saving features. [Pass around examples of batteries with RBRC label and an example of an Energy Star® label.]

#### 3. Finding Environmentally Preferable Products

(Slide 84) How difficult is it to find environmentally preferable products? The good news is that the products are available in most of the supply sources used by Federal purchasers. GSA, for example, publishes an Environmental Products and Services Guide and also makes the products available in its online ordering system, the GSA Advantage!®. GSA uses recognizable symbols to indicate environmental preferability. DLA also produces an Environmental Products Catalog and uses environmental attribute codes and a tree symbol to signify EPP products in its online ordering system. The codes were developed by the Federal Logistics Information System (FLIS) to identify products in the Federal supply system that have environmental benefits. Mandatory sources, including JWOD and UNICOR, also provide products that are environmentally preferable or made with recovered materials. [Provide attendees with a handout of web sites of sources of environmental products.] If purchasers use non-government supply sources, they should obtain information about the environmental attributes of in-stock items and make their preference for environmentally beneficial products known to the vendor.

#### 4. EPP In Contracts

(Slide 85) The impact of EPP programs is strongest when agencies incorporate the principles into Federal contracts. Contracts account for 90 percent of Federal spending on goods and services and, therefore, are an ideal venue for maximizing the purchase of green products. Contrary to what some may believe, turning a contract into a "green" contract is not that difficult. One thing is certain; it must start in the early stages of contract development. The specifications must contain the language for specifying recycled-content, energy-efficient, and/or environmentally preferable products.

First, we should identify which contracts should address EPP. Certainly supply contracts for the procurement of goods should be considered. These may include purchase orders, blanket purchase agreements, or indefinite delivery contracts. Are there EPA-designated products in the contract? Are there green alternatives for the product(s) specified? Beyond supply contracts, we must look carefully at service contracts. In performing the specified services, what supplies will be procured or used? Here is a list of some of the common service contracts that may involve one or more of the categories of green products:

Janitorial
Landscaping
Administration
Material/Waste Management
Copier Services

Construction/Renovation Maintenance (Buildings, Roads) Overall Facility Management Fleet Service Agreements Document Printing

Let's use the example of a janitorial contract. Using the process laid out in the FAR, we must think about energy and environmental considerations from the start of the acquisition process. First, identify which EPA-designated recycled content products may be purchased or supplied as part of the contract. Commercial sanitary tissue (including restroom towels, toilet paper, and tissue) and trash bags are all EPA-designated items. But we shouldn't stop at the recycled content products. What "green" products could be purchased and used in the performance of janitorial services? Examples are carpet shampoo, deodorizers, furniture polish, spot remover, window cleaner, bathroom cleaners, disinfectants, and liquid hand soap. The contract specifications could stipulate that less hazardous, water-soluble alternatives be used in place of caustics or cleaners with hazardous constituents. A final step in greening the contract could be the requirement of janitorial staff to collect recyclables in addition to collecting the wastes. A contract that incorporates these three elements – CPG products, EPP, and recycling/waste reduction – is the optimal realization of green purchasing.

Remember that, according to FAR Part 11, specifications, product descriptions, standards, requirements, and even source selection criteria must incorporate energy and environmental considerations. So before we can put in any FAR clauses, the requirements must also be in the specifications, scope of work, or any other standards or requirements documents. It is very important to emphasize that the FAR clauses cannot stand alone.

(Slide 86) Here is an example of simple wording in a janitorial contract specification that incorporates the buy recycled element:

All non-chemical products proposed for use under this contract must conform to the Environmental Protection Agency (EPA) Comprehensive Procurement Guidelines (CPG) if the products are EPA-designated items. It is desirable for products that meet the desired objective (e.g., ability to clean effectively) and are not CPG-designated items also contain the highest possible amounts (by percentage) of recovered material(s) and postconsumer content.

(Slide 87) The following contract language incorporates additional considerations, which can be further appended by adding more "mandatory product attributes" to the list.

Prior to contract award, the successful bidder must identify all janitorial products intended to be used in providing janitorial services by product name, manufacturer name, and product type. (Examples of product type include glass cleaner, toilet bowl cleaner, tub/tile cleaner, air freshener, furniture polish, spot remover, floor finish, disinfectant, and graffiti remover.) In addition, the successful bidder must submit documentation that provides proof that all ingredients, both active and inert, in each of the janitorial

products identified for use in execution of the contract, adhere to the criteria specified as mandatory product attributes below.

S	No bioaccumulative and toxic chemicals.
S	No hazardous waste characteristics.
S	No ozone-depleting substances.
S	Low VOC levels.
S	Recycled content.
S	No known or suspected carcinogens.

(Slide 88) You may want to provide resources for specification writers, planners, and engineers to obtain examples of contract language. A good place to start is EPA's EPP web site, at http://www.epa.gov/oppt/epp. This contains information on EPA's Five Guiding Principles for EPP, describes how standards are developed, and lists ongoing Federal EPP pilot projects. Under the EPP Tool Suite, there is a multimedia training module for buying green, a Database of Environmental Information for Products and Services (containing example contract language), and a Promising Practices Guide for "Greening" Contracts. This guide contains short success stories on Federal agencies that have greened their service contracts.

Using EPA's web site, the search for example contract language is easy. The Database of Environmental Information for Products and Services is set up like a store; we can browse, or we can search the database by choosing the "aisle" we would like to be in based on the type of product or service we are seeking. For example, if we would like to write contract specifications that call for environmentally preferable alternatives to industrial and household cleaners, we could search the database under the keyword "cleaners." This search yields several examples of Federal or state agency contracts that fit the bill. (By the way, we shouldn't limit our search to Federal agencies. Many states and local organizations have made great strides in the development of green contracts, such as Massachusetts; King County in Washington; Seattle, Washington; and Santa Monica, California.) The search results provide us with a quick view of the contents and restrictions of the contract language, as well as the opportunity to view the language in its entirety in a text or .PDF file. Under the search for cleaning products, the Commonwealth of Massachusetts contract contains requirements for prohibiting carcinogens and ozone-depleting substances, and also considers health impacts, reduced packaging, and recycled content.

In summary, there are already good examples of contracts incorporating recycled content, energy efficiency, and other environmentally preferable purchasing considerations. We can use those as a starting point to ensure the specifications and product descriptions for goods and services contracts meet the environmentally preferable purchasing directives of E.O. 13101.

#### **UNIT 7 – BIOBASED PRODUCTS**

(Slide 89)

(Slide 90) The new "buy bio" program, like the buy recycled program, is a mandatory purchasing program. Biobased products are defined as commercial or industrial products (other than food or feed) that utilize biological products or renewable domestic agricultural (plant, animal, and marine) or forestry materials. Some common examples of biobased products are soy-based ink, particleboard made from rice straw, and biodiesel. [Pass around examples of such products if you have them. Note what products are currently in use at your facility.] The "Buy Bio" program is similar to the buy recycled program in that the Federal government will use its huge purchasing power to support a national program, in this case, this country's agricultural industry. The biobased program also favors the production and use of alternative crops, such as kenaf.

# 1. The Buy Bio Program

(Slide 91) Under E.O. 13101, Federal procuring agency purchase of biobased products was *encouraged*. With the passage of the Farm Security and Rural Investment Act of 2002 (the 2002 Farm Bill), however, the preferential purchase of biobased products was made a **mandatory** part of green purchasing programs.

USDA will designate products for Federal agencies to purchase and provide recommendations, such as biobased content levels, for purchasing the products. Agencies then will have one year to amend their affirmative procurement programs to incorporate the USDA-designated products, review and revise specifications and other contracting documents, and train employees. (Slide 92) One key difference from the buy recycled program is that USDA is authorized to create a labeling program for biobased products, which will make it easier for purchasers to identify products that meet USDA's biobased content recommendations.

(Slide 93) USDA is considering designating products in the following 11 product categories:

- Sorbents
- Adhesives
- Fuel Additives
- Construction Materials and Composites
- Lubricants and Functional Fluids
- Fibers, Papers, and Packaging
- Solvents and Cleaners
- Plastics
- Landscaping Materials, Compost, and Fertilizer
- Vegetable Oil Inks
- Paints and Coatings

The same exemptions will apply to purchasing biobased products as currently apply to recycled

content products – i.e., when price, performance, or availability are unreasonable, there is no requirement to purchase the biobased product. As with the buy recycled program, there will be a requirement to document such decisions. There will also be a requirement to report on purchases of the USDA-designated products, and OFPP will use this information to prepare a biennial Report to Congress.

#### 2. Program Implementation

In order to implement the new buy bio program, agencies will need to train their purchase card buyers, specifications writers, engineers, planners, and all contracting, acquisition, environmental, and public works personnel. This may be held in conjunction with initial or refresher AP and EPP training. [Discuss the training mechanisms to be applied at your facility, such as purchase card holder training.]

The FAR currently contains general requirements for purchasing biobased products through specifications and contracts. FAR Part 23, Subpart 23.7 – Contracting for Environmentally Preferable and Energy-Efficient Products and Services, contains a requirement to consider the use of biobased products. More specific requirements to fully implement the 2002 Farm Bill requirements could be added in the future.

#### **UNIT 8 – WHAT ABOUT PRICE?**

#### (Slide 94)

Many people believe that green products are always more expensive than comparable products. This is not true. The training slides include four examples of recycled content products that are less expensive and one example of a recycled content product that costs only slightly more than the non-recycled content equivalent.

- (Slide 95) Retread truck tires cost approximately 2/3rds less than virgin tires. Why? Because when a product is remanufactured, most of the components are used again, so there are less costs for raw materials and the energy associated with processing those raw materials. All remanufactured products cost 1/3rd, half, or 2/3rds less than non-remanufactured products and save the government money. Often, remanufactured products have new components and, in the case of toner cartridges, might contain more toner than original equipment cartridges. Examples of remanufactured products include retread tires, remanufactured toner cartridges, rebuilt office furniture, and rebuilt automotive parts.
- The oil prices are FY 2002 prices for bulk commercial oil and (Slide 96) MIL-SPEC oil purchased from the Defense Supply Center Richmond.
- The copier paper prices are FY 2002 truckload prices for paper purchased through the Government Printing Office. The price difference at that time was about 4 percent and currently is about 4 percent.
- (Slide 97) The toner cartridge prices are FY 2002 prices for products offered through GSA Advantage. Again, the remanufactured toner cartridge is nearly half the price of a new replacement toner cartridge.
- The 3-ring binder prices are also FY 2002 prices from GSA Advantage. Note that the recycled content product also is a JWOD item, so not only is it less expensive, but purchasing it also meets the requirement to purchase products from the blind and severely disabled.

#### UNIT 9 – EXAMPLES OF BUYING GREEN

(Slide 98) Service Contracts

(Slide 99) The Federal government is using service contacts more and more as we contract out many of the activities that we formerly performed with in-house staff. These contracts provide an opportunity to require the contractor to supply or use green products in the performance of the contract. For example, NASA leases all of its copiers. The lease includes the supply of replacement copier paper. When Executive Order 12873 first established the 20 percent postconsumer content standard for office papers, NASA asked its vendor to supply recycled content paper. The vendor refused, so NASA canceled the contract and solicited for a new lease. Lanier won the contract and supplied NASA with 20 percent postconsumer content paper, and now supplies 30 percent postconsumer content paper.

When the janitorial services contract for the Interior headquarters buildings ended, Interior's facilities managers decided to green the next contract. The contract requires the contractor to supply recycled content tissue and towel products and to use environmentally preferable cleaning products. You can find information on this contract through EPA's EPP web site, www.epa.gov/opptintr/epp.

#### Statements of Work

When green products will be supplied or used in the performance of a service contract, agencies can opt to use detailed scopes of work or performance based contracts. For example, EPA developed a detailed "green rider" for its Kansas City regional office building and for its Research Triangle Park laboratory. The green rider specifies each green product that is to be used and the requirement, such as minimum recycled content, for each product. The "green rider" is available electronically through the green building section of EPA's web site, http://www.epa.gov/greenbuilding/green.htm. Similarly, GSA's model Solicitation for Offer (SFO) for leases includes mandatory and optional clauses for the supply or use of recycled content, energy- and water-efficient, and environmentally preferable products, as well as recycling.

#### **Acquisition Planning**

Our most successful green purchasing efforts occur when agencies "think green" right from the start of the acquisition process, as now required by the FAR. An example is the renovation of the Pentagon parking lot. The Pentagon facilities staff decided to try a green contract. They split the job into two – one part to be renovated using a conventional renovation contract and the other part to be renovated using a "green" contract. They then formed a team that identified 20 products commonly used in parking lot renovations, including crack and joint sealers, asphalt, striping paint, bumper stops, etc. Working with EPA, they identified environmental attributes for each product. The contract included an incentive for identifying products with additional environmental attributes.

Not only did the job go well, it turned out to be cost-effective because the asphalt milled off the parking lot surface was recycled instead of disposed in a landfill, creating a saving on avoided disposal fees. And the "green" surfacing seems to be performing better than the conventional job!

#### **Substitution Policies**

The first recycled content product substitution policies occurred when agencies wrote to the central sources of supply (GSA, GPO, DLA) and requested that they supply recycled content paper or re-refined oil, whether or not the order from a facility specified recycled content. More recently, several Federal facilities are working with office supply companies such as Office Depot and Boise Office Products to create electronic catalogs. Part of the agreement is that the office supply company substitutes a green product whenever a non-green product is ordered.

# **Agency Policies**

Several agencies have issued policies regarding the use of specific green products. It is EPA's policy to use 100 percent recycled content paper bleached without the use of chlorine. USDA has a policy to use biodiesel in its diesel vehicles wherever biodiesel is available.

#### **Past Performance**

As discussed earlier, asking potential contractors about their experience and knowledge with specifying and using green products helps to assure that green products will actually be supplied and used in performance of the contract.

#### **UNIT 10 - PROGRAM IMPLEMENTATION STRATEGIES**

(Slide 100)

#### 1. Introduction

To fully comply with Federal requirements and maximize the use of green products and services, facilities must create a workable, realistic program. This is best accomplished by taking specific steps to institute a policy, define responsibilities, and maintain measurable tasks, not unlike the development of environmental management systems. These programs may be developed by Federal agencies, but it is important that each individual facility embrace the agency program and supplement with site-specific requirements. The topics we'll discuss under implementation strategies include leadership and teamwork, responsibilities, promotion and training, reporting, tracking, and monitoring.

# 2. Leadership

(Slide 101) The success of any program begins with support from leadership. Particularly with a program that involves changing attitudes and business practices, it is vital that the organizational leadership stands behind the program and does so conspicuously. One of the first requirements of a program is to have a facility-wide green purchasing policy that is endorsed by the leadership and conveyed to all personnel. This may be a short policy letter, memorandum, or regulation that states the organization's commitment to buying green and encourages or requires participation. [Provide an example of a policy letter, and reference any agency policies currently in effect.] The policy should address a few key elements:

- State organizational commitment.
- Identify a person or organization responsible for the program.
- Require participation from relevant personnel.
- Set specific goals.
- Provide guidelines for implementation.

The guidelines for implementation may include a definition of the exemptions to be used under the buy recycled program. For instance, what is considered unreasonable price at the facility, or has this been defined at the agency level? Another implementation guideline may be the process for recording and authorizing the written justification. Who has the responsibility to prepare the justification, and what is the approval authority and process? Also, the mechanisms for reporting and tracking green purchases must be addressed. Some of this information may be developed via a green procurement team as the program matures. Initially, command/management support is fundamental to activating the program.

#### 3. Teamwork

(Slide 102) Following a facility policy, teamwork is essential in the beginning stages of a facility-wide purchasing program. Because purchasing decisions occur at so many levels in an

organization, representation and input from key personnel is important. Personnel from contracting, engineering, and purchase card programs all have a stake in the facility's procurement programs, and should be involved in the planning, policy-making, and implementation. Although the facility may not be receptive to forming new committees, the green procurement team may be a short-term entity that initiates the program and develops guidance and strategies, while the program manager is responsible for the sustaining the program. Representatives from the following organizations are the suggested participants in the green procurement team, but these will be specific to the agency and facility:

Contracting/Procurement Logistics/Supply Engineering/Planning/Specifications
Environmental Legal Office Purchase Card Administration
Training Tenant Activities Non-appropriated Fund Activities
Retail/Dining Facilities Acquisition Public Affairs
Facility Contractors

# 4. Responsibilities

(Slide 103) Nothing gets done if it isn't someone's job. Someone must be accountable for the program's success. The effectiveness of any purchasing program depends on the support and participation of a vast number of purchasers, specification writers, and procurement officials. The green procurement team will define the responsibilities within the program, including who will take the lead for the program's documentation, reports to the facility manager or base commander, data collection, and monitoring. Each representative will assist in determining the responsibilities of his/her organization. For example, responsibilities of the contracting activity may include:

- Ensure all facility contracts for the procurement of goods and services meet FAR requirements for recycled content, environmentally preferable, biobased, and energy- and water-efficient products.
- Advise procuring activities and requirements generators on green purchasing requirements and the availability of green products and vendors.
- Ensure the written determinations for not buying recycled content products are justifiably based on price, performance, or availability and are placed in the appropriate contract file.
- Provide in-house training to all contracting officers and specialists on the purchasing program requirements.

# 5. Promotion and Training

(Slide 104) The procurement program will depend heavily on promotion and training of appropriate personnel. The number of people affected is staggering, considering the amount of purchasing and specifying done at a facility on a daily basis. It is essential that training be provided, particularly for those generating requirements, making purchases, or administering contracts. One way to do this is to conduct generalized training at your facility. Preferably, the training will be mandatory. We suggest you target specific audiences such as contracting

personnel, purchase card holders, requirements generators, and management personnel. You may want to bring in an outside speaker to provide some initial, generalized training. Such training is available through various sources, including OFEE, US Army Center for Health Promotion and Preventive Medicine, Department of Energy, Center for a New American Dream, and Maryland Environmental Service. You can find a list of training contacts in these organizations on the OFEE web site at http://www.ofee.gov/gp/gp.htm.

General promotion of the program should be designed to reach the maximum number of employees. This may be accomplished in several ways, including:

- "Buy Green" or "Buy Recycled" posters strategically placed in hallways, offices, retail establishments, cafeterias.
- Prompter messages sent via electronic mail or bulletin board.
- Articles in facility newsletters or newspapers.
- Displays provided at community events, such as Earth Day.
- Promotion to local schools.
- Information posted on the facility web site.
- Sponsorship of product expos or vendor fairs.

# 6. Reporting

Background. Tracking and reporting compliance with the buy recycled requirements have been a challenge. In theory, when agencies report to OFPP and OFEE on their annual purchases of the EPA-designated products, they report on purchases made with purchase cards, purchases made through services contracts, and purchases made directly through supply contracts. In reality, because of limitations in the electronic Federal procurement data collection system, most agencies only report on direct purchases made through supply contracts. Beginning in FY 2002, agencies were able to use the Federal Procurement Data System to track whether contracts greater than \$25,000 require the use of recycled content products. The annual data call now requests FPDS information from agencies. We will discuss current reporting mechanisms and mechanisms for future reporting that are being considered.

What's in the Law. (Slide 105) RCRA requires OFPP to report to the Congress every two years on actions taken by Federal agencies to implement affirmative procurement. (Slide 106) OFPP and OFEE jointly send out a RCRA data call to Federal agencies annually and jointly prepare the report to Congress.

The 2002 Farm Bill contains similar reporting requirements for agency purchases of USDA-designated biobased products. In the future, once USDA issues a list of designated products, OFPP and OFEE will re-convene the interagency Reporting Workgroup to develop the biobased products data call.

E.O. 13101 directs Agency Environmental Executives (AEEs) to report to the FEE on progress implementing their AP strategic plans. It also directs acquisition and procurement personnel to

submit justifications for not purchasing CPG items with recovered material to their AEE and submit a plan and timetable for increasing CPG compliant purchases.

Current Reporting Requirements. (Slide 107) Contracting officers use the newly revised Standard Form 279 (civilians) or DD Form 350 (Department of Defense) to report purchases of EPA-designated products. These forms are used to report information to the Federal Procurement Data System on contract actions worth \$25,000 or more. On the revised forms, the user indicates if any EPA-designated products will be supplied or used in the performance of the contract. If the agency did not require that the contractor supply or use recycled content products, the user indicates which of the three exceptions was used (price, performance, or availability). Another field on the form requires the user to indicate if either or both FAR clauses (52.223-4 and/or 52.223-9) were used.

The SF 270 and DD 350 can be used to record only limited data. They provide the total dollar amount of contracts that included EPA-designated products, but only for contracts accompanied by the form. For instance, the DOD requires DD Form 350 only for contracts exceeding \$25,000 (although the Navy uses the form for all contracts). It is hoped that the data will provide an indication of which exceptions are being used and if the FAR clauses are being used. It is the intent of OFPP and OFEE that we begin to monitor behavior and to educate organizations that are not buying recycled content products.

In addition to reporting data from FPDS, beginning in FY 2002, agencies will report on their purchases of eight indicator products, rather than their purchases of all 54 EPA-designated products. GSA and DLA will report agency purchases of EPA-designated products made through their stock programs, while agencies will report on their purchases of these products from other sources. The eight indicator products by category are:

- Paper: Commercial Sanitary Tissue.
- Non-Paper Office: Toner Cartridges.
- Construction: Concrete.
- Landscaping: Landscaping Timbers.
- Park and Recreation: Park Benches/Picnic Tables.
- Transportation: Traffic Barricades.
- Vehicular: Re-refined Oil.
- Miscellaneous: Signage.

To implement this new strategy, OFPP and OFEE changed the data call for FY 2002. The latest data call asks for purchasing information for the eight indicator items and the following additional information:

- Tallies of data from the SF 279 and DD 350 forms.
- Information on pollution prevention and recycling programs and initiatives.
- Information on AP management controls such as what are the policies, what types of training programs exist, descriptions of auditing programs, and agency goals.

Making Reporting Work. (Slide 108) You will need to respond to the requirements issued by your agency and formulate your reporting to meet the required content and format. One of the first questions should be "how do we purchase designated items?" Determining the purchasing mechanism is the first step to identifying personnel responsible for tracking and reporting purchases. Purchasing mechanisms may include contracts, purchase cards, purchase orders, and supply requisitions.

It is important to capture as much data on the purchases of the eight indicator items as possible. Applicable contracts should be carefully designed and reviewed to ensure that specifications reflect the preference for recycled content products and that pertinent clauses are included. Contracts to be considered include construction, traffic control/management, janitorial, copying/printing services, grounds keeping, and vehicle maintenance. A facility point of contact (POC) could be assigned to each of the indicator items and that person would be responsible for implementation and tracking of purchases.

Training is an important element of reporting, and one that should not be overlooked. Since the revision of the contract reporting forms (SF 279 and DD 350), there has been little training of the users to enable them to properly fill out the form. Many users questioned did not know what EPA-designated products were, and therefore could not accurately ascertain whether those products were acquired in the contract.

# 7. Tracking and Monitoring

(Slide 109) Tracking and monitoring green purchasing go hand-in-hand with reporting. It will be necessary to have a tracking system in place in order to accurately report compliant purchases as required by RCRA and E.O. 13101. However, Federal agencies and facilities may wish to employ additional, internal tracking mechanisms to measure agency progress, gather data to meet reporting requirements, and identify program strengths and weaknesses. Many Federal agencies have already developed internal procedures to track and monitor green purchasing. At some facilities, the purchase card administrators have developed forms and other tracking mechanisms to capture purchasing information. One DLA facility developed an internal procedure for purchase card transactions to remind the purchaser to make environmentally preferable decisions. Another included green and CPG purchasing on the checklist for purchase card audits. Still another developed a matrix listing the 54 EPA-designated products and matched them with columns for "purchased with recycled content" and the three allowable exemptions. The table was required to be used by purchase card purchasers to record all transactions involving CPG products. Although not strictly required, such recordkeeping provides valuable data supporting the compliance status of the facility's purchasing program.

Internal monitoring of agency contract purchases is also necessary to demonstrate compliance and measure success. Federal contracting activities should already receive annual procurement management review. Green purchasing requirements should be incorporated into this yearly review process. Samples of contracts for the purchase of EPP/CPG products or for services requiring the use of these products should be reviewed for the presence of compliant FAR

clauses and relevant specifications.

## **UNIT 11 – GOALS AND PERFORMANCE MEASURES**

(Slide 110)

(Slide 111) E.O. 13101 requires agencies to establish three sets of goals for waste prevention, recycling, and green purchasing activities:

- Section 601 requires each agency to "establish either a goal for solid waste prevention and a goal for recycling or a goal for solid waste diversion to be achieved ... by the years 2005 and 2010."
- In addition, "Agencies shall set goals to increase the procurement of products that are made with recovered materials, in order to maximize the number of recycled products purchased, relative to non-recycled alternatives."
- The third set of goals required by the E.O. is: "Each agency shall set a goal for increasing the use of environmentally preferable products and services for those products and services for which the agency has completed a pilot program."

(Slide 112) The E.O. encourages agencies to incorporate these goals into their Government Performance Results Act annual performance plans as they submit their annual budget requests to the Office of Management and Budget. Finally, Section 601 of the E.O. requires that agencies report their progress on attaining these goals to the FEE.

(Slide 113) Many agencies have adopted goals and incorporated them into their E.O. 13101 strategic plans. It is important to find out what your agency's goals are and to incorporate them into facility or site planning so that each individual agency facility can do its part to help meet the overall agency goals. If your agency has not yet adopted its goals, you can help in that process by assessing what your facilities can accomplish by 2005 and 2010. EPA has proposed a nationwide goal of a 35 percent solid waste diversion rate to be achieved by 2005. Agencies should adopt goals that meet or exceed this nationwide goal.

(Slide 114) As part of the planning process, it is also important to look at how progress towards meeting the goals will be measured. Performance measures need to be quantifiable and measureable. For example, a facility's waste diversion rate can be calculated as the quantity of materials recycled (let's say, in tons) divided by the sum of the waste that went to the landfill (in tons) plus the quantity of materials recycled (in tons).

Where these data are available at the agency and facility levels, it's a good idea to look at the data for your facility over the last several years. Rather than using tables of boring data, plotting the data in bar graphs shows the picture over time. Trends could be identified, as well as areas that could use improvement. You might want to focus initially on paper products and the improvements in buying recycled that we have seen there. Then you can look at areas, such as toner cartridges, where the compliance may not be so good until and unless facility green procurement team decides to purchase remanufactured toner cartridges.

#### **UNIT 12 – COMPLIANCE**

(Slide 115)

Prior to E.O. 13101, there was no direct enforcement of Federal agency buy recycled programs. (Slide 116) E.O. 13101 directed EPA to conduct RCRA section 6002 facility compliance reviews and to report on such reviews to OFEE. EPA conducts section 6002 inspections in conjunction with RCRA or multimedia inspections. The RCRA section 6002 inspections began in FY 2000. States having RCRA authority were also permitted to conduct inspections under section 6002.

EPA developed a standard pre-visit questionnaire and inspection checklist, which you can find by visiting the OFEE web site, www.ofee.gov, clicking on Green Purchasing, and scrolling down to the end of that section. Federal facilities are, therefore, able to anticipate the focus of the inspection visits.

RCRA authorizes EPA to issue notices of violation (NOVs) or compliance agreements, but the enforcement authority does not extend to administrative penalties, or monetary fines. EPA is considering using RCRA section 6002 violations to supplement a RCRA fine under a multimedia inspection. In other words, a RCRA section 6002 violation may increase a fine being issued for other RCRA violations found during the same inspection. [If applicable, discuss NASA facilities that have received inspections, NOVs, and/or compliance agreements. Provide specific information as to the inspection process and any violations reported.] To date, EPA has not issued an NOV for non-compliance with section 6002, but reportedly an NOV is imminent.

Section 7002 of RCRA, the citizen suit provision, allows private citizens to initiate legal action for AP violations. From time to time, Federal facilities have received citizen complaints and procurement questions from manufacturers of products made with recovered materials. It has been speculated that such inquiries were possibly precursors to such legal actions.

(Slide 117) The focus of the early EPA inspections (FY00- FY01) was on facility motor pools. EPA chose this activity for several reasons:

- RCRA multimedia inspections typically included visits to those sites.
- Motor pools involve a limited number of EPA-designated products (re-refined lubricating oil, retread tires, and engine coolant).
- The EPA-designated products are well-known and widely available.
- Motor pools are fairly common at Federal facilities.

These early inspections were conducted primarily to gather information on facility compliance and to raise awareness. An ancillary objective was to determine the compliance assistance needs of the facilities visited. Such assistance is available from EPA (although not through the inspectors or enforcement offices) and OFEE.

(Slide 118) The EPA questionnaire is typically sent to the facility prior to an inspection visit. The questionnaire's focus is on assessing the facility's level of awareness, documented policies and procedures, and procurement of EPA-designated items. The questionnaire addresses the

#### following:

• AP program awareness, specifically for environmental and procurement managers.

S		Facility procurement policies - written and specific to facility, and
	prom	oted to facility personnel.
S		Monitoring and tracking of the program.
S		Person(s) responsible for the program.
S		Notification of vendors of EPA-designated products.
(Slide 119)		Č 1
` s´		Acquisition/procurement planning process.
	S	Is there emphasis on recycled products?
	S	The facility is asked to provide a copy of contract or procurement
		document that reflects such emphasis.
c		Divisions and haldons
S	•	Purchase card holders.
	S	Have purchase card holders been informed?
	S	Are records kept for purchases of designated items?*

<sup>\*</sup> There are currently no Federal requirements for purchase card holders to keep records of purchases, nor is there a requirement to document the use of exceptions under the micropurchase threshold. It is assumed that if purchase card records were being kept, the EPA would request to review them.

The results of the questionnaire are collected by the issuing EPA regions and compiled into a report sent to OFEE. [If any of your agency's facilities have received EPA questionnaires, discuss the results of the questionnaires if available.]

During EPA's site visit, the inspector uses the checklist to assess the facility's compliance with RCRA section 6002. As stated previously, the focus of the early inspections was on the motor pool operations. More recently, EPA has become interested in going "beyond the motor pool" and evaluating the extent to which AP has been integrated into contracting and purchase card programs.

(Slide 120) [Provide NASA point(s) of contact and web site(s)]